

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) An ink jet printer for recording a desired image on a recording medium by ejecting ink which includes a cationic polymerization component and which is curable when irradiated with UV light to the recording medium, the printer comprising:

a recording head for ejecting the ink to the recording medium;

a UV light irradiation section for irradiating with UV light the light to the ink placed on the recording medium;

a humidity detecting section for detecting humidity around the ink placed on the recording medium; and

a controller for controlling irradiation of the UV light to be irradiated from the UV light irradiation section on the basis of detected humidity detected by the humidity detecting section.

2. (Currently amended) The printer of claim 1, wherein the controller controls the irradiation of the UV light to be irradiated from the UV light irradiation section on the basis of a relationship between the detected humidity detected by the humidity detecting section, and a desired UV irradiation and a desired irradiation time of the light corresponding to the detected humidity.

3. (Currently amended) The printer of claim 1, wherein the controller has a conversion table showing a relationship between the detected humidity detected by the humidity detecting section around the ink placed on the recording medium, and a desired UV irradiation and a desired irradiation time ~~of the light~~ corresponding to the detected humidity.

4. (Currently amended) The printer of claim 2, wherein the controller has a conversion table showing a relationship between the detected humidity detected by the humidity detecting section, and the desired UV irradiation and the desired irradiation time ~~of the light~~ corresponding to the detected humidity.

5. (Currently amended) The printer of claim 3, wherein the controller comprises a central processing unit, and performs processing for calculating the desired UV irradiation of the UV light irradiation section and the desired irradiation time corresponding to the detected humidity by using the conversion table with the central processing unit.

6. (Currently amended) The printer of claim 5, wherein the controller determines whether the calculated desired UV irradiation ~~calculated~~ is ~~not lower~~ higher than a maximum limited UV irradiation of the UV light irradiation section ~~or not~~ by performing the processing for calculating the desired UV irradiation and the desired irradiation time corresponding to the detected humidity around the ink placed on the recording medium by using the conversion table.

7. (Currently amended) The printer of claim 6, wherein the maximum limited UV irradiation is whichever is lower of a first irradiation and a second irradiation, the first irradiation being based on power consumption, and the second irradiation being based on life span of the light irradiation section, lower irradiation of irradiation determined on the basis of electricity consumption of the light irradiation section and irradiation determined on the basis of life span of the light irradiation section within irradiation of UV radiation the maximum limited UV irradiation being capable of irradiating the ink placed being irradiated onto the recording medium without shrinking and distorting the recording medium.

8. (Currently amended) The printer of claim 6, wherein the conversion table is determined on the basis of sensitivity of the ink to the UV light.

9. (Currently amended) The printer of claim 6, wherein the controller determines a plurality of values of the maximum limited UV irradiation on the basis of a type of the recording medium.

10. (original) The printer of claim 8, wherein the controller changes the conversion table according to a type of the ink.

11. (Currently amended) The printer of claim 9, wherein the controller selects any one the maximum limited UV irradiation among the plurality of values of the maximum limited UV irradiation on the basis of the type of the recording medium.

12. (Currently amended) The printer of claim 6, wherein the central processing unit of the controller informs of abnormality of at least one of humidity environment condition and a UV light irradiation condition when determining that the desired UV irradiation calculated based on the detected humidity is not lower than the maximum limited UV irradiation.

13. (Currently amended) The printer of claim 12, further comprising a display section for displaying a screen for informing of the abnormality of at least one of humidity environment and the UV light irradiation condition according to an instruction of the central processing unit.

14. (Currently amended) The printer of claim 6, wherein the central processing unit of the controller raises UV irradiation of the UV light to be irradiated from the UV light irradiation section to the desired irradiation, and determines the desired irradiation time when determining that the desired UV irradiation calculated based on the detected humidity is lower than the maximum UV limited irradiation.

15. (Currently amended) The printer of claim 4, wherein the UV light irradiation section irradiates the UV light of the desired UV irradiation for the desired irradiation time.

16. (Currently amended) The printer of claim 5, wherein the UV light irradiation section irradiates the UV light of the desired UV irradiation for the desired irradiation time.

17. (Currently amended) The printer of claim 6, wherein the UV light irradiation section irradiates the UV light of the desired UV irradiation for the desired irradiation time.

18 (Canceled).

19. (Withdrawn) The printer of claim 1, wherein the light irradiation section takes two steps to irradiate the light.

20. (Withdrawn) The printer of claim 19, wherein the light irradiation section carries a first light irradiation after the ink is placed on the recording medium and carries a second light irradiation after the first light irradiation.

21. (Withdrawn) The printer of claim 20, wherein the first light irradiation is carried in 0.001 to 2.0 seconds after the ink is placed on the recording medium, more preferably 0.001 to 1.0 second.

22. (Currently amended) The printer of claim 1, wherein the UV light irradiation section irradiates the UV light having ~~irradiation that a maximum irradiation of an~~ effective wavelength range in curing the ink is of 0.1 to 50 mW/cm².

23. (Currently amended) The printer of claim 1, wherein the UV light irradiation section irradiates the UV light having ~~irradiation that a maximum irradiation of an~~ effective wavelength range in curing the ink is of 51 to 3000 mW/cm².

24. (Currently amended) The printer of claim 1, wherein the humidity detecting section is

~~provided in a distance capable of detecting~~ is positioned such as to detect the humidity around the ink placed on the recording medium from the recording head, such position being in a carrying direction of the recording medium and above the recording medium.

25. (Original) The printer of claim 1, further comprising a plurality of humidity detecting sections for detecting humidity around the ink placed on the recording medium.

26. (Withdrawn) The printer of claim 1, further comprising:

a carrying section for carrying the recording medium in a predetermined carrying direction; and

a dehumidifying section for dehumidifying a portion around the ink placed on the recording medium by sending dry air to the portion around the ink placed on the recording medium.

27. (Withdrawn) The printer of claim 26, wherein the controller determines whether the detected humidity detected by the humidity detecting section is not lower than predetermined humidity on the basis of the detected humidity, and makes the dehumidifying section operate when determining that the detected humidity is not lower than the predetermined humidity.

28. (Withdrawn) The printer of claim 26, wherein the dehumidifying section sends the dry air in substantially all width of the recording medium.

29. (Withdrawn) The printer of claim 26, wherein the dehumidifying section comprises

an electronic cooling device, and sends the dry air cooled by the electronic cooling device.

30. (Withdrawn) The printer of claim 26, wherein the dehumidifying section is provided in a distance capable of dehumidifying the portion around the ink from the light irradiation section in the predetermined carrying direction of the recording medium.

31. (Currently amended) An image recording method for recording a desired image on a recording medium by ejecting ink which includes a cationic polymerization component and which is curable when irradiated with UV light to the recording medium, the method comprising:

- ejecting the ink to the recording medium;
- irradiating the UV light to the ink placed on the recording medium;
- detecting humidity around the ink placed on the recording medium; and
- controlling UV irradiation of the UV light to be irradiated on the basis of the detected humidity detected.

32. (Withdrawn) The method of claim 31, further comprising:

- carrying the recording medium in a predetermined carrying direction; and
- dehumidifying a portion around the ink placed on the recording medium by sending dry air to the portion around the ink placed on the recording medium.